

FIG.1

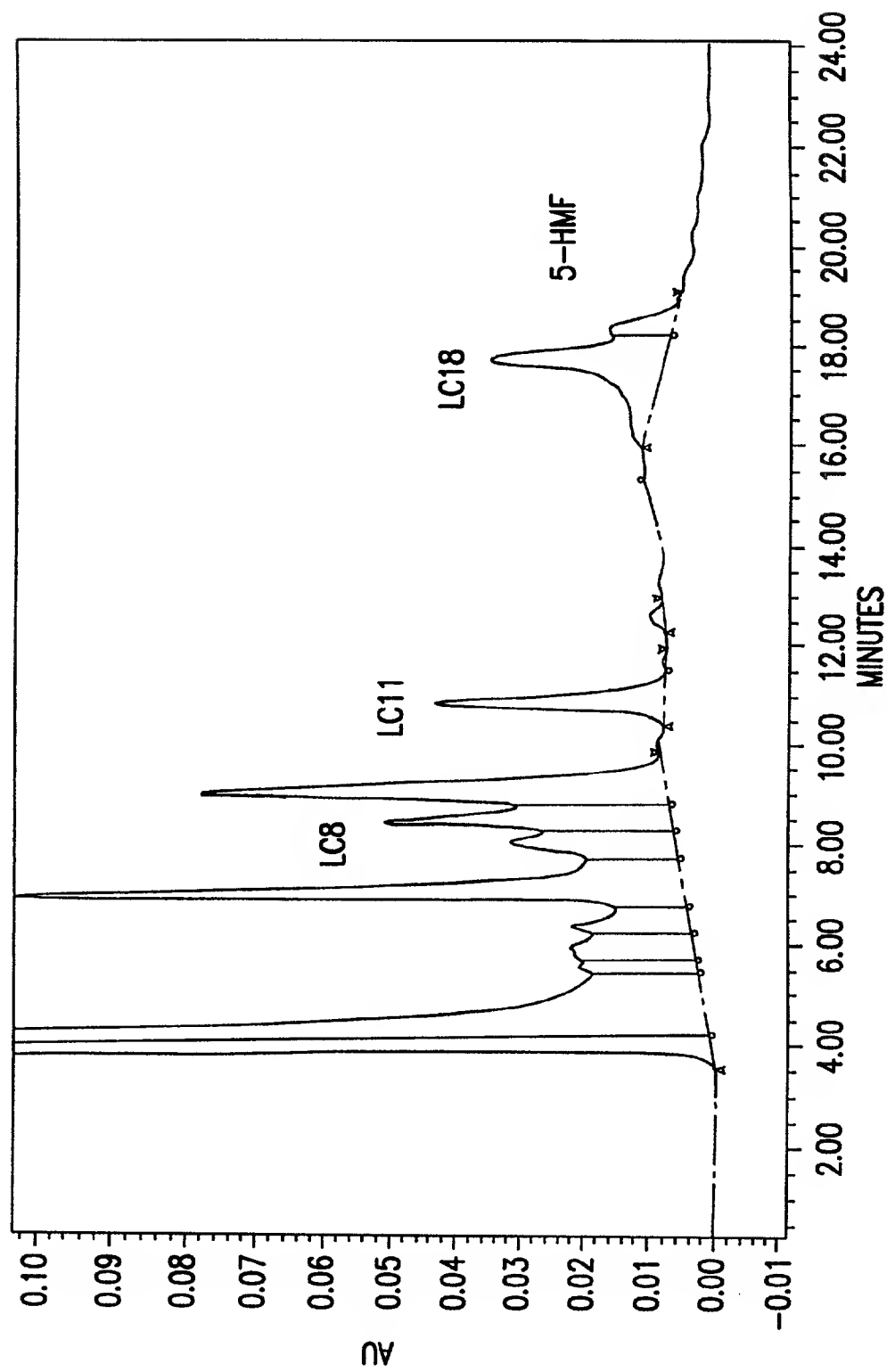


FIG.2

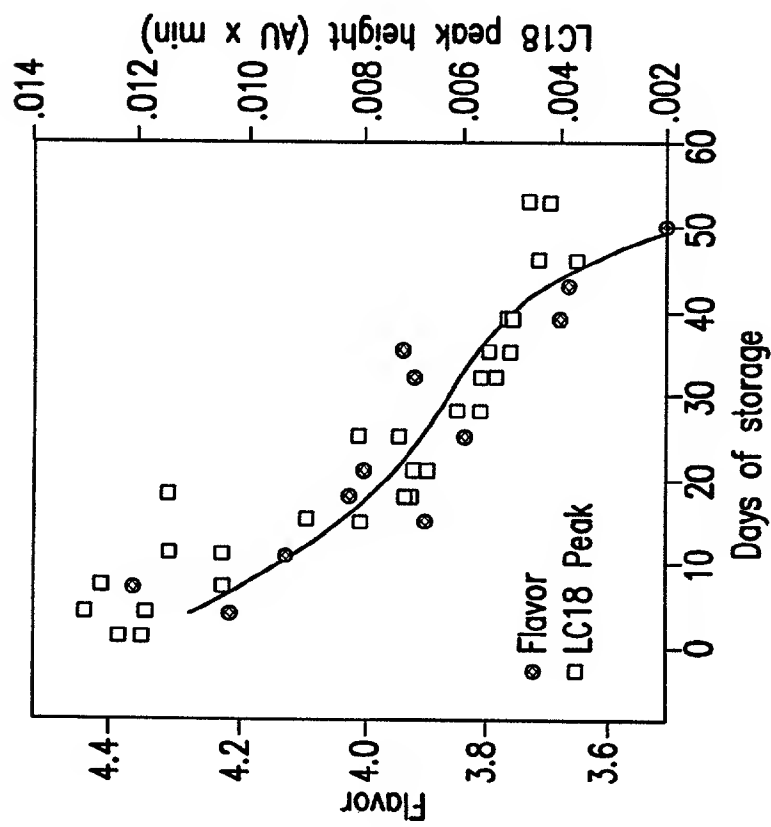
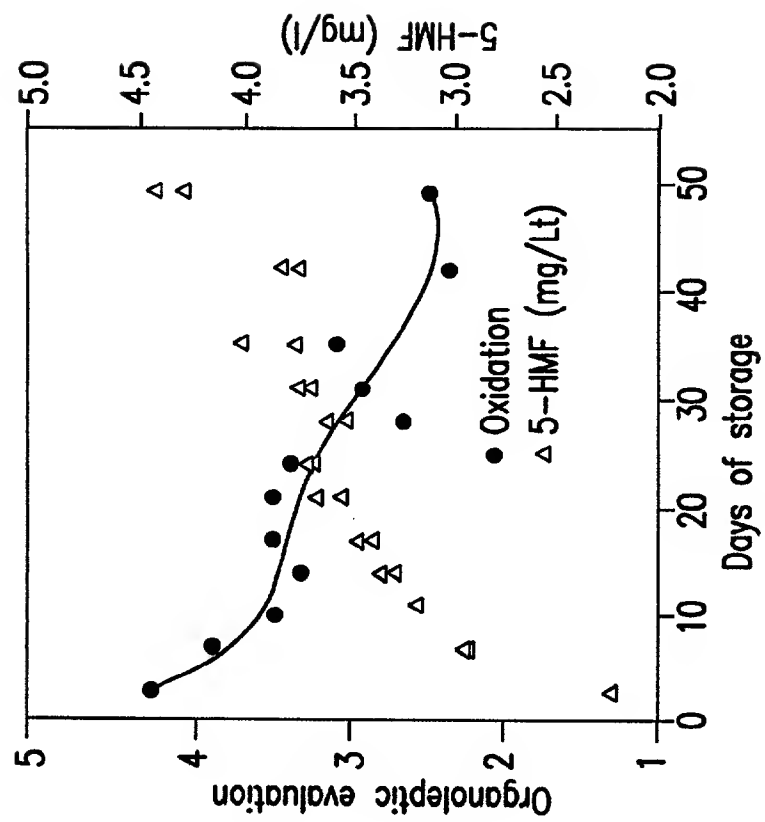


FIG. 3A



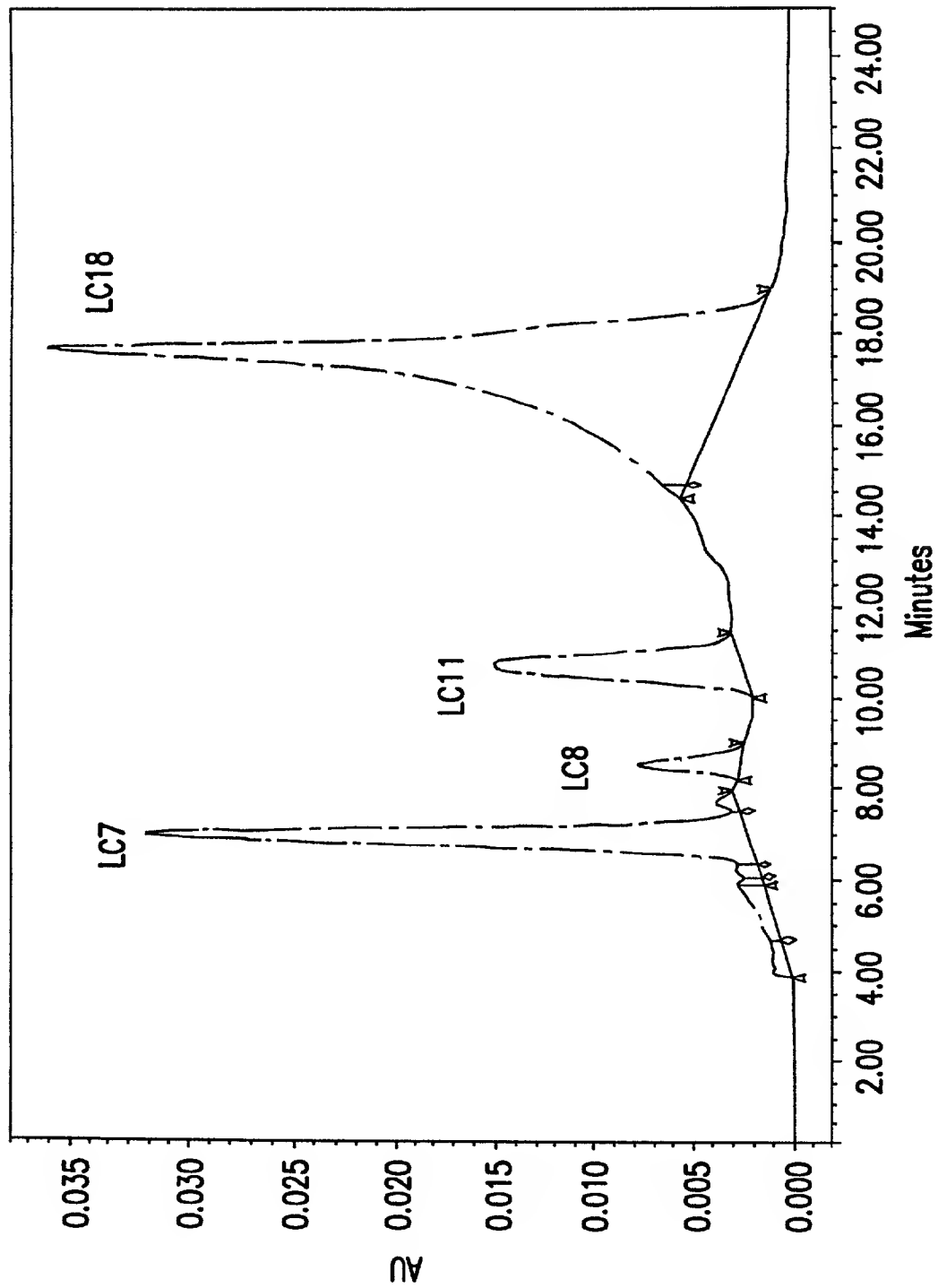


FIG.4

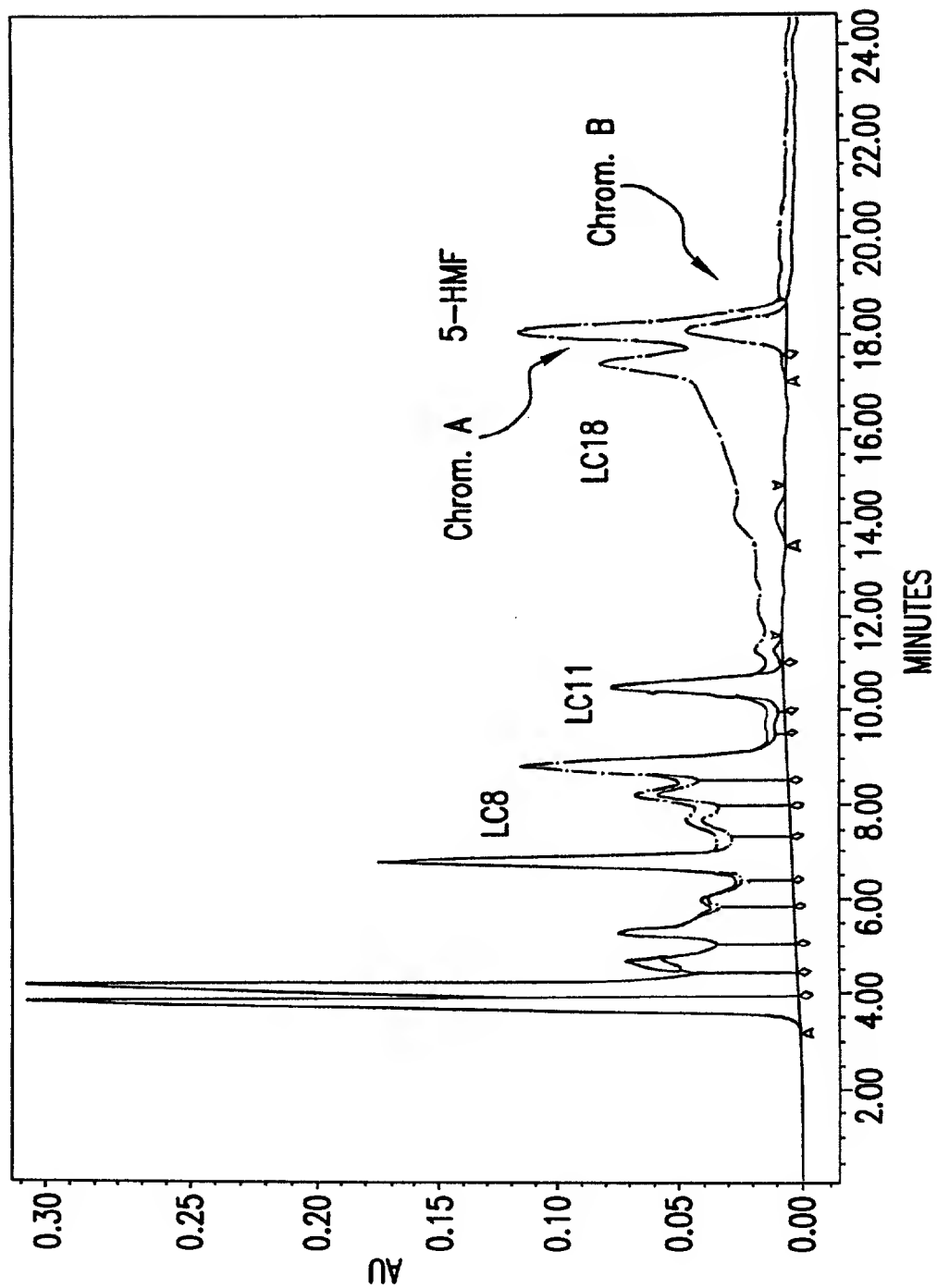


FIG.5

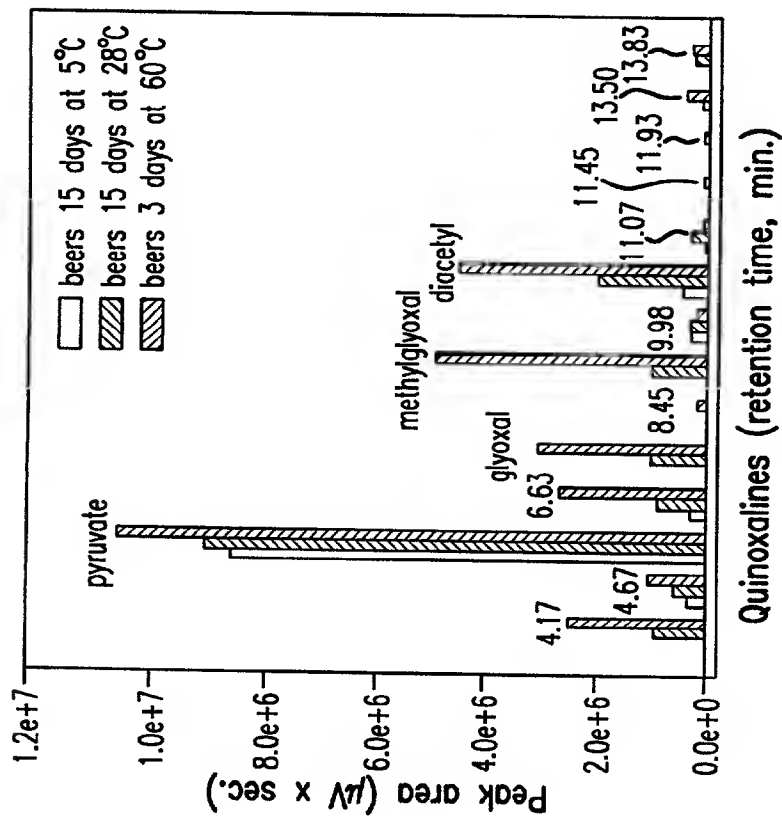


FIG. 6A

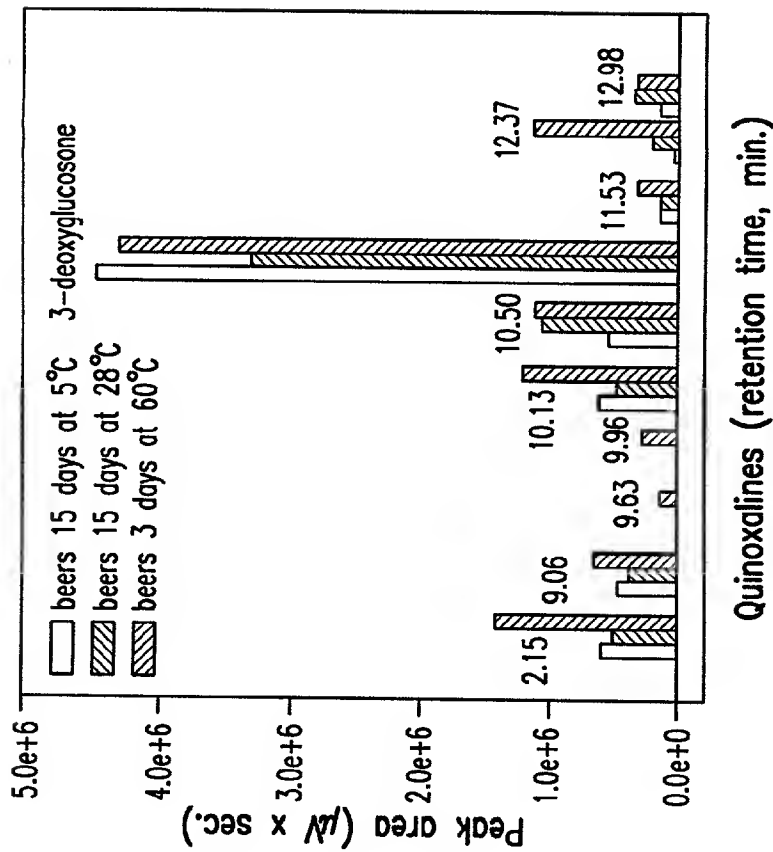


FIG. 6B

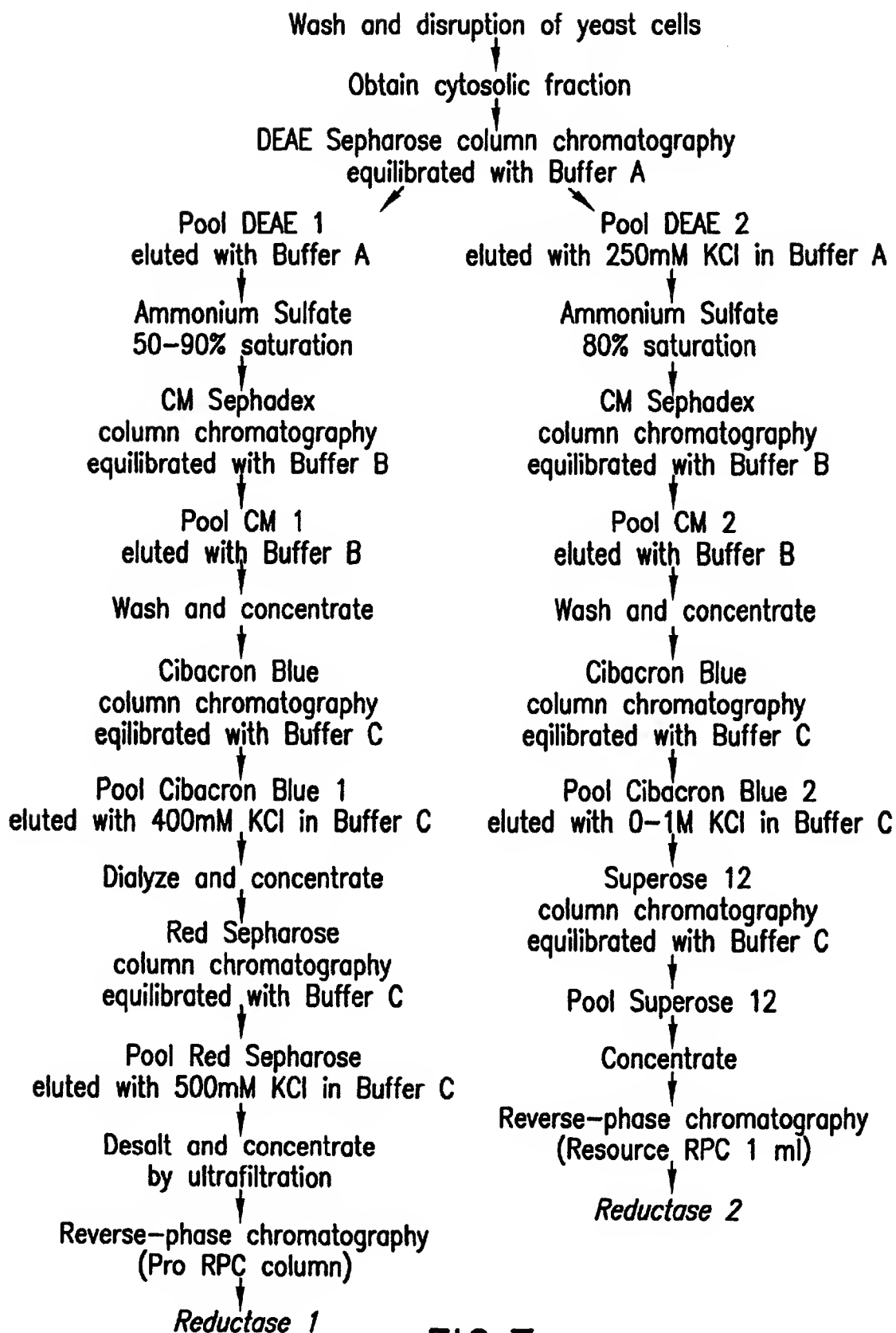


FIG.7

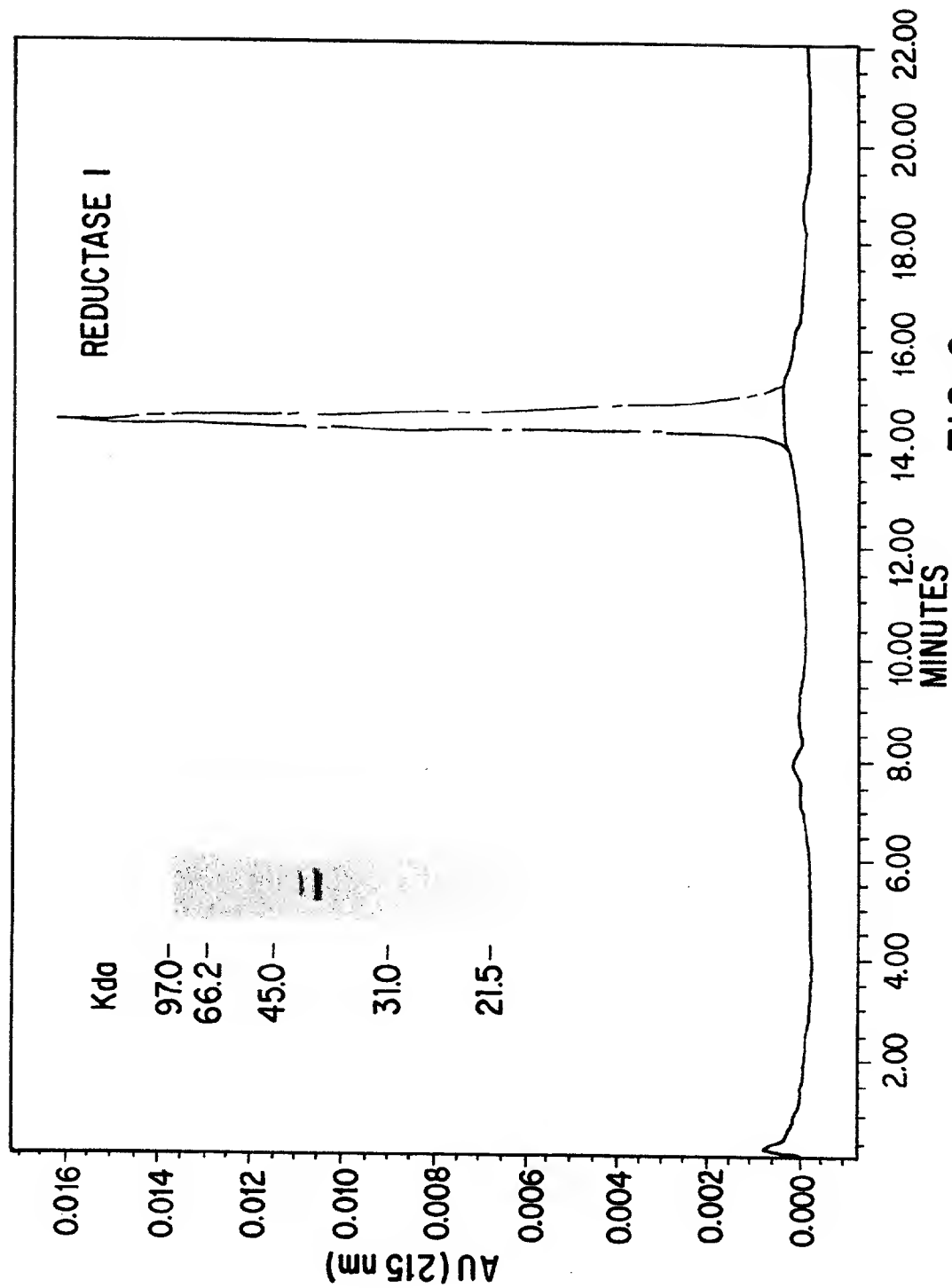


FIG. 8

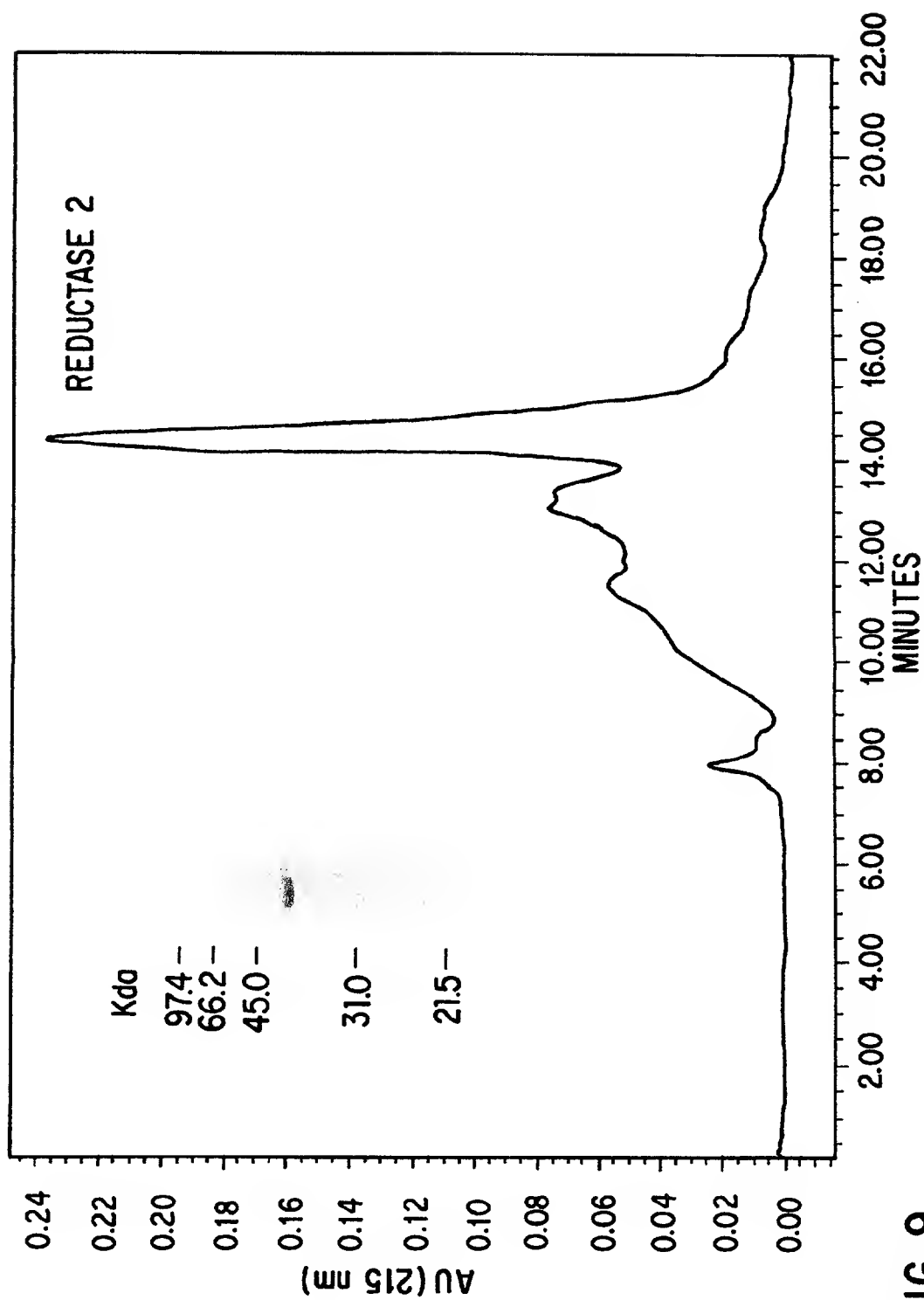


FIG. 9

Substrate	Activity (nmol/min/mg)	
	Reductase 1	Reductase 2
Pyridine-3-aldehyde	111.5	0.0
D-glucoronate	7.0	182.1
Acetaldehyde	585.8	41.9
Methylglyoxal	331.6	230.3
D-glucose	23.1	0.0
D-galactose	12.1	0.0
D-xylose	34.2	0.0
Metylrapone	329.6	383.0
2,3-butanodione	238.1	189.5
2,3-pentanodione	20.1	0.0
3-deoxyglucosone	190.9	115.1
Pyruvate	9.0	0.0

FIG.10

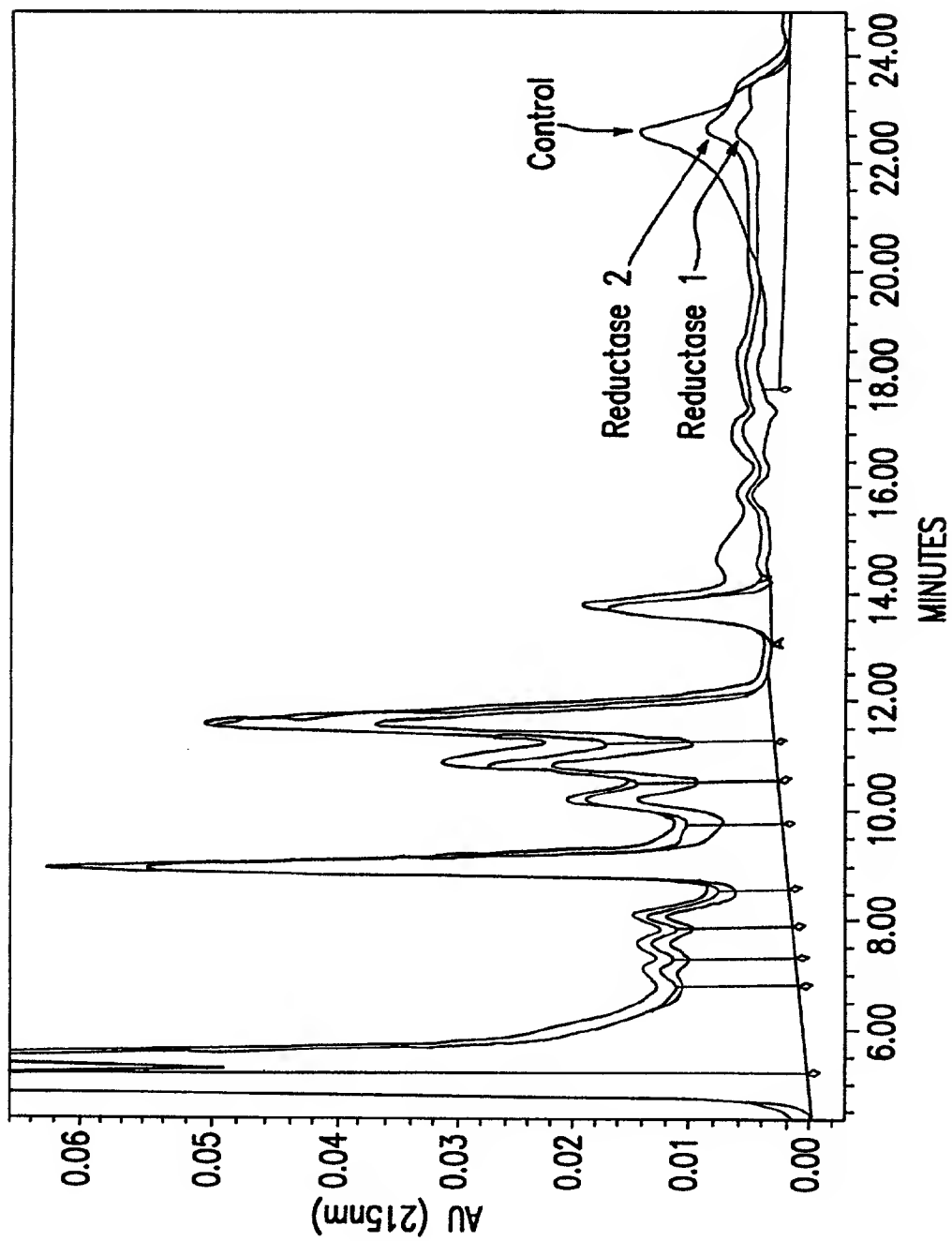


FIG.11

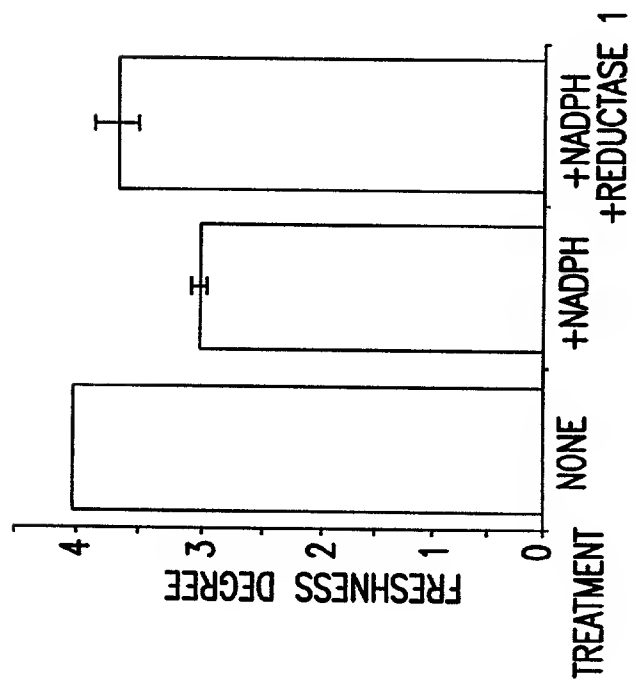


FIG. 12A

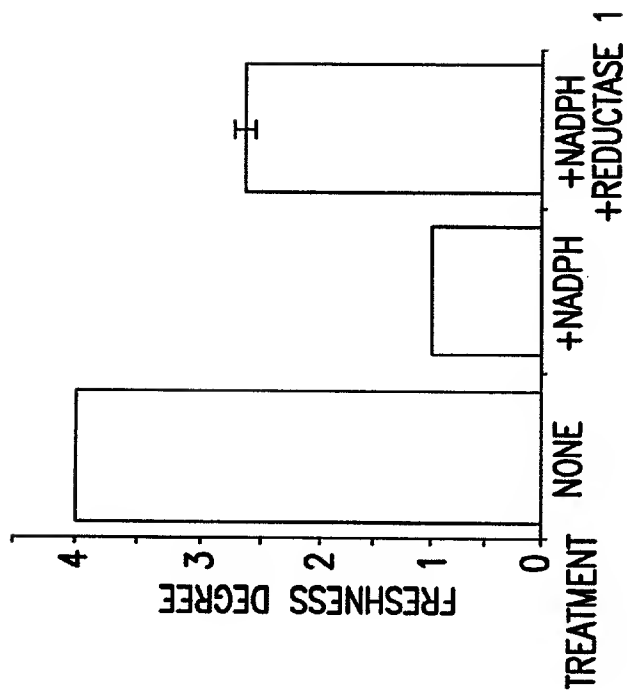


FIG. 12B